

MACHINE SERVICE BULLETIN #94

SUBJECT: Universal Motors

DATE: October 30, 1929

TO ALL OFFICES:

In Machine Service Bulletin #93 issued under date of July 23, 1929 on the subject of Universal motors, we outlined the range limits of this type of motor and how to adjust it to maintain a machine speed of 300 r. p. m.

We have since been conducting various experiments in which Universal motors were involved, and we have discovered that it is possible to obtain a closer adjustment of the speed when changing from alternating to direct current, by changing the location of a short-circuiting screw for the purpose of controlling the windings in the main field.

After the cover of the journal box is removed, as explained in the Bulletin mentioned above, it will be noted that there is a U shaped brass blank at the top of the insulating disc. This blank has a screw hole on either side. These screw holes are designated AC and DC. Therefore, the screw is to be located in the correct screw hole to represent the current on which the motor is to be used. Under no circumstances should a screw be in each side of the blank at the same time.

The purpose of the screw is to short circuit a portion of the field of the motor so that part of the windings will be eliminated. In other words, this screw acts as a compensating switch for the windings of the field.

It is very important that this screw be properly located in adjusting our Universal motor, because if it is in the AC position and the motor is used on direct current, the speed will increase, while if it is in the DC position and is used on alternating current, the speed will decrease.

It is therefore, very important and necessary that all Monroe servicemen understand this adjustment.

J. M. Smith

General Service Manager

FMS:W

Mr. M. Hitchcox
Toledo, Ohio

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